General Guidelines for Coastal Shoreline Stabilization Projects

Highest Annual Tide (HAT) - The HAT line needs to be shown on all plans. Any riprap placed below the HAT is considered impact to the coastal wetland. HAT can be estimated by measuring the distance from a known high tide to the level of the published HAT for the region. This information is published at http://www.maine.gov/dep/blwq/docstand/szpage.htm.

Placement of rock material below the HAT must be minimal, if any. More than 500 square feet of coastal wetland impact (riprap placed below the HAT) may require compensation.

Visual Impact - The potential visual impact of the project needs to be assessed. Matching stone color to the existing shoreline and adding plantings within or adjacent to the riprap are ways to mitigate potential visual impacts.

Vegetation - The planting plan with the stabilization project should include types of vegetation, location of plantings, size and number of plantings, and a survival rate provision requiring additional plantings, if necessary to achieve an 85% survival rate. Riprap should be limited to where the active erosion is occurring; the remainder of the slope should be vegetated to the maximum practical extent.

Examples of vegetation that can thrive in this type of exposed rocky coastal environment are Rosa rugosa, Fragrant Sumac, Bayberry, Sweetfern, and Bar Harbor juniper. Sufficient planting pockets, and plantings of a sufficient size, should be incorporated into the riprap to result in a well-vegetated riprap slope within one or two growing seasons from construction.

Riprap Details - Plans must indicate areas to be covered with riprap and a cross section of the proposed riprap area. Engineered plans may be required. If access to the water is desired, an access way should be incorporated into the plan.

Documented Erosion Problem – The area to be armored must be demonstrated to have an existing erosion problem.

Causes of Erosion - Erosion caused by surface water may require additional plantings and provisions to facilitate water flow such as interceptor drains. Wave action may require more direct armoring.

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